Status of the California Department of Defense Petroleum Hydrocarbon Cleanup Demonstration Program

One of the recommendations by the University of California/Lawrence Livermore National Laboratory to the State Water Resources Control Board (SWRCB) was to identify a series of leaking underground fuel tank (LUFT) demonstration sites to act as a training ground for the implementation of a risk based correction action (RBCA) process modified for California. To address this recommendation, a LUFT cleanup demonstration program is being developed that uses a series of Department of Defense (DoD) bases in California. The objective of this demonstration program is to field test and refine the application of RBCA within California. This demonstration program is being conducted in cooperation with the SWRCB in cooperation with U.S. EPA Region IX. RBCA as it is applied in California can provide a state-wide framework consistent decision process that identifies low risk soils and groundwater cases and appropriate risk management strategies. An expert committee has been formed to review this process.

The selection of representative installations to be used as DoD LUFT cleanup demonstration program locations is being coordinated through the CMECC Water Process Action Team. To date, ten bases have been selected. These are George Air Force Base (AFB), Vandenberg AFB, Castle AFB, Travis AFB, Port Hueneme NCBC, Barstow MCLB, China Lake NWS, El Toro MCAS, Camp Pendleton, and Presidio of San Francisco. These installations are intended to represent each branch of the military services with bases in California, as many of the nine Regional Water Quality Control Boards as possible, and the diverse hydrogeologic settings in California where LUFT cleanup problems occur.

Application of Historical Case Analysis to LUFT Risk Management Approaches.

While LUFT risk management decisions should be site specific and individual sites should be examined in light of the risk posed to receptors, the applicability of passive bioremediation, and any future losses to the beneficial uses of impacted resources, regional data gathering and analysis can be used to streamline site characterization, reduce costs, and develop risk management strategies. Common predictable LUFT site characteristics can be used to group sites and appropriate risk management strategies can be developed for these groups. The key is a large historical case data set. Examples of recent historical case analysis results that show the benefit of this approach will be presented.